

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

P210

Application Number

UNKNOWN

Applicant(s)

GLEN SILVA ABAD, ET AL

Filing Date

UNKNOWN

Group Art Unit

UNKNOWN

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,356,334		R. D. GRAY	454	51	
		5,554,416		R. G. SCHEUFLER, ET AL	427	378	
		6,040,777		K. AMMANN, ET AL	340	632	
		6,168,646		W. L. CRAIG, ET AL	95	14	
		US2002/0062788 A1		D. M. CZECH, ET AL.	118	696	

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PRIOR ART STATEMENT

The attached PTO form 1449 and patent application lists the entire prior art considered pertinent by the inventors at this time.

1. US Patent No.: 5,356,334 "Apparatus And Method For Airborne Particulate Booth" by R. D. Gray uses sensors to monitor the pressure drop across filters. A signal is provided when the filters are near the end of their useful life. The apparatus is primarily designed for use in powder type spray operations. Therefore, it uses a filter pulsing system to periodically unclog the filter(s). When the pulse rate becomes almost constant, the alarm signal is activated. The system also provides for signaling when the end of filter life is approaching and shutting down the system should the filter become clogged to a point that it is ineffective. However, it is not desirable to completely shut down the spray booth, but only the spray gun. The system does not compensate for initial filter condition

2. US Patent No. 5,554,416 "Automated Air Filtration And Drying System For Waterborne Paint And Industrial Coatings" by F. G. Scheufler, et al. Pressure sensors upstream and downstream of the main filter are used to monitor the pressure drop across the filter. As the pressure drop increases, signaling filter loading, a signal is sent to a blower to increase the flow rate to compensate therefore. A series of lights illuminate as the blower speed increases indicating filter condition. Thus adequate warning is provided to the operator to turn off the spray booth prior to complete filter failure. However, such a system depends upon the alertness of the operator to shut down the spray booth. Thus there is always a possibility that of operator error. In addition, the Scheufler, et al. system does not compensate for initial filter condition.

3. Published Patent Application No.: US 2002/0062788 AI "Apparatus And Method For Configuring Spray Coating Application Systems" by D. M. Czech, et al. Here a system to remotely monitor the performance of a spray coating booth via the Internet and the like, however, no specific mention of filter monitoring is made.

4. US Patent No.: 6,168,646 "Flow Rate Control Of Temperature Controlled Fluids" by W. L. Craig, et al. discloses the use a filter assembly including a first roller of fresh filter material and a take up roller. The filter is disposed across the airflow path. As the exposed portion of the filter becomes clogged, the pressure drop there across causes the exposed portion of the filter to distort. This causes the exposed portion of the filter to make contact with a switch, which activates the rollers causing the take up roller to pull unexposed filter material off the first roller across the flow path and winding up the clogged portion on the take up roller. However, no warning device is provided for indicating that the last portion of the filter is clogged. The system does not compensate for initial filter condition

5. US Patent No.: 6,040,777 "Device And Process For Indicating The Exhaustion Of A Fan Filter" by K. Ammann, et al. also discloses a device for determining filter life. However, the filter is designed to remove gases from the air. A gas detection device measures the level of the gas and if it rises to a predetermined level, indicating filter saturation, an alarm signal is provided. The system does not compensate for initial filter condition.



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